

SOLAR CELL WITH AN ELECTRICALLY INSULATING  
LAYER UNDER THE BUSBAR

ABSTRACT OF THE DISCLOSURE

5 A solar cell (20) includes a photovoltaic energy source (22), a frontside  
array of metallic gridlines (38) deposited upon a front face (24) of the  
photovoltaic energy source (22), and a busbar structure (42) in electrical  
continuity with the frontside array of metallic gridlines (38). The busbar structure  
(42) has an electrical insulator layer (44) overlying and contacting the front face  
(24) of the photovoltaic energy source (22), and a metallic busbar layer (48)  
10 overlying and contacting the electrical insulator layer (44). The metallic busbar  
layer (48) is in electrical continuity with the frontside array of metallic gridlines  
(38). The solar cell (20) is preferably a concentrator solar cell (20).